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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|----------------------------------|-------------|----------------------|---------------------|------------------|
| 10/815,695 | 04/02/2004 | In-Young Chung | 8947-000073/US | 9739 |
| 30593 | 7590 | 02/14/2006 | EXAMINER | |
| HARNESS, DICKEY & PIERCE, P.L.C. | | | TON, MY TRANG | |
| P.O. BOX 8910 | | | ART UNIT | |
| RESTON, VA 20195 | | | PAPER NUMBER | |
| | | | 2816 | |

DATE MAILED: 02/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|--------------------------------------|--|--|
| Office Action Summary | Application No. 10/815,695 | Applicant(s) CHUNG, IN-YOUNG | |
| | Examiner My-Trang N. Ton | Art Unit 2816 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-5 and 7-22 is/are rejected.
- 7) ☒ Claim(s) 6 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.



**MY-TRANG NUTON
PRIMARY EXAMINER**

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>7/7/05</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Rejections - 35 USC § 112

Claims 4, 7-12, 16-22 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 4, it is unclear as to whether “a power down signal” recited in line 2 is additional limitation “a precharging control signal” as cited in line 3, claim 1.

Claim 7 recites the limitation “the second output driver” in line 11. There is insufficient antecedent basis for this limitation in the claim. Moreover, it is unclear as to whether “a first data bit” recited in last line is a part of “associated data bits” as cited in line 3.

Claims 10, 16 and 20 are similarly rejected as claim 4 regarding “a power down signal”.

Claim 17 is similarly rejected as claim 7 regarding “a first data bit” recited in last line.

In single claim 21, which claims both an apparatus and the method steps of using the apparatus is indefinite under 35 U.S.C. 112, second paragraph. In *Ex parte Lyell*, 17 USPQ2d 1548 (Bd. Pat. App. & Inter. 1990). Claim 21 directed to a system comprising a gate circuit and the method steps of using it was held to be ambiguous and properly rejected under 35 U.S.C. 112, second paragraph.

Claim 22 is similarly rejected as claim 21. Moreover, claim 22 is also similarly rejected as claim 7 regarding the limitation “the second output driver” (line 7).

Claims 8-9, 11-12, 18-19 are rendered indefinite by the deficiencies of claims 7 and 17.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-5, 13-16 and 21 are rejected under 35 U.S.C. 102(b) as being anticipated by Yau et al (U.S Patent No. 6,498,520).

Yau et al disclose in Figs. 1-14 a system for minimizing the effect of clock skew including:

a gate circuit (200" – 400") for inputting a precharging control signal (precharge enable) and for generating an output driving signal (output of 200" and 400") in response to the control signal (precharge enable) before a data bit (select<0>, select<1>) is input; and

an output driver (MP, MN1) connected to a data channel (channel connected to VDD) and responsive to the output driving signal (the output of 200" and 400") for precharging the data channel to a voltage level before the data bit (select<0>, select<1>) is input as recited in claim 1.

Regarding claim 2: the control signal (precharge-enable) is enabled during a time period before the data bit (select<0>, select<1>) is input.

The limitation recited in claim 3 is inherent seen in Fig. 14.

Regarding claim 4: the gate circuit (200"-400") does not generate the output driving signal (the output of 200" and 400") upon receiving a power down signal (switch enable) associated with a power down logic state.

Regarding claim 5: the output driver includes first and second transistors (MP, MN1) connected serially between the data channel (the channel connected to VDD) and a ground voltage (GND).

The method recited in claims 13-16 and 21 are similarly rejected as claims 1-5.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to My-Trang N. Ton whose telephone number is 571-272-1754. The examiner can normally be reached on 7:00 a.m - 5:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Callahan can be reached on 571-272-1740. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



My-Trang N. Ton
Primary Examiner
Art Unit 2816